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ROGUE RIVER WATERSHED

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1956

U.S.SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

& U M M A R Y

For details see page:

- 1-2 Water Supply Outlook: Good to abundant water supplies are forecast for the entire area. Near-record snow-cover on Applegate and Illinois Rivers will provide volume flows similar to 1952 when many stream records were broken.
- Streamflow Forecasts: Forecasted volumes for the April-September period vary from 122 to 190 percent of average. The Rogue at Raygold is forecast to discharge 128 percent of average. This flow will be 8th highest since records began in 1906. Forecasted inflow to Hyatt, Fourmile, and Fish Lake reservoirs is expected to be nearly one-half above average. Flow of the Applegate at Copper for the irrigation season is expected to be 190 percent of average.
- Reservoir Storage: Stored water in the four main reservoirs is about 5 percent above average representing a nice recovery from the unusually dry water situation of last year.
- Snow-Cover: Water content of snow varies from 136 percent average on the Upper Rogue area to 223 percent average on the Illinois watershed. New snow-records were established at Billie Creek and Fourmile Lake.
- Soil-Moisture: All soils in mountain watersheds are extremely wet and will cause snow-melt or rain-water to enter the streams rapidly. Valley soils could use one-half inch of moisture now.
 - Current Streamflow: Winter streamflow has been much above average with two separate flood periods. Total discharge of the Rogue at Raygold has been 171 percent average in the period October through March.

WATER SUPPLY OUTLOOK For April-September, 1956a

| Source of Water | Acreage Irrigate | |
|----------------------------------|---------------------|---|
| DOME CE OT MODEL | TITIGAU | |
| Althouse Creek | 250 | Water supplies much above average. Snow-cover is about double the average. |
| shland Creek | 302 | Adequate water for all usual uses. Snow-cover is well above last year |
| Applegate River (Big) | 6,687 | Ample water for all usual irrigation. Snow-cover is 183 percent of average. Flow of river will be 190 percent average. This flow is only slightly less than in 1952 |
| Applegate River (Little) | 644 | Adequate water for all usual irrigation. Snow-cover is well above last year. |
| Bear Creek | 375 | Adequate water for all usual irrigation. Eagle Point Irrigation District will have |
| Butte Creek (Big) | 5,222 | ample supplies from this stream. Snow-cover is much above last year and all watershed soils are extremely wet. |
| Elk Creek | 136 | Adequate water for all usual irrigation. |
| Evans Creek | 800 | Adequate water for all usual irrigation. |
| Fourmile and Fishlake Reservoirs | 13,183 | Water supplies for Medford and Rogue River Valley Irrigation Districts are expected to be ample with watershed soils extremely wet and a snow-cover much above that of last year. |
| Grave Creek | 125 | Adequate water for all usual irrigation. |
| Hyatt and Emigrant Reservoirs | 10,317 | Talent Irrigation District is expected to have adequate water supplies this year. Snow-cover is much greater than last year. |

a - Assuming normal meteorological conditions during the April - September period.

WATER SUPPLY OUTLOOK (Contd.)

| Source of Water | Acreage Irrigate | ed Outlook | | | | | |
|---------------------------|---|---|--|--|--|--|--|
| Illinois River | 400 | Ample water for all usual irrigation. Snow-cover is about double the average. | | | | | |
| Illinois River, East Fork | 900 | Abundant water supplies. Snow-cover is about double the average. | | | | | |
| Illinois River, West Fork | 200 | Adequate for all usual irrigation. | | | | | |
| Jump-off Joe Creek | 210 | Adequate for all usual irrigation. | | | | | |
| Neil Creek | 1,178 Ample water for all usual irria Snow-cover is much above lost y Late summer flow should be well | | | | | | |
| Red Blanket Creek | 313 | Ample water for all usual irrigation. | | | | | |
| Rough and Ready Creek | 200 | Adequate for all usual inrigation. Snow-cover has been well above average. | | | | | |
| Rogue River | Ample water for all usual irr Snow-cover is much above last 14,088 Flow of Rogue is set at 128 p age. Grants Pass Irrigation D expect low flow to hold well cal discharge point. | | | | | | |
| Slate Creek | 200 | Adequate water for all usual irrigation. | | | | | |
| Sucker Creek | 1,042 | Ample water for all usual irrigation. Snow-cover is nearly double the average. | | | | | |
| Thompson Creek | 861 | Ample water for all usual irrigation. year Snow-cover is about double that of last/ | | | | | |
| Wagner Creek | 145 | Ample water for all usual irrigation. Snow-cover is about double that of last year. | | | | | |
| Williams Creek | 720 | Ample water for all usual irrigation. Snow-cover is about double that of last year. | | | | | |

SIREAMFLOW FORECASTS a as of April 1, 1956

| | Gaging Station | Seasonal S | treamflow in | | |
|---------|--------------------------------------|------------------|--------------------|---------------------------|---------------------------|
| No. | Name | Forecast 1956 | Forecast Period | 15-Yr. Avg. 1938-52 | as % of 15-Yr. Avg. |
| | | | | and ab | 7.00 |
| 7294 | Applegate R., nr. Copper | 220.0 | Apr-Sept. | 116.0 ^b | 190 |
| 8321 | Fourmile Lake net Inflow* | 10.4 | Apr-Sept. | 7.0 | 149 |
| 8320 | Hyatt Res. net Inflow* | 8,8 | Apr-Sept. | 6.0 | 147 |
| 712 | Illinois R., nr. Kerby | 315.0 | Apr-Sept. | 181.2 | 174 |
| | L. Butte Cr., N. Fk., bel. Fish Lk.* | 22,0 | Apr-Sept. | 14.9 | 17-8 |
| | Rogue R., abv. Prospect* | 400,0 | Apr-Sept. | 316,5 | 126 |
| | Rogue R., abv. Prospect* | 330.0 | Apr-July | 265.1 | 126 |
| 7217 | Rogue R., M. Fk., nr. Prospect* | 9.1.0 | Apr-Sapt. | 74.3 | 122 |
| ,, | Rogue R., M. Fk., nr. Prospect* | 72.0 | Apr-July | 58.7 | 122 |
| 7282 | Rogue R., S. Fk., nr. Prospect* | 102.0 | Apr-Sept. | | 134 |
| 1202 | Rogue R., S. Fk., nr. Prospect* | 86.0 | Apr-July | 65.1 | 132 |
| 7277 | Rogue R., below South Fork | 835.0 | Apr-Sept. | 680.8 | 123 |
| 1 - 1 1 | Rogue R., below South Fork | 690.0 | Apr-July | 553.0 | 125 |
| 721 | Rogue R., at Raygold nr. Central | 1160.0 | Apr-Sept. | 905.6 | 128 |
| 124 | | 970.0 | Apr-July | 750.7 | 123 |
| 7000 | Rogue R., at Raygold nr. Central | 1100.0 | | 852.8 ^b | 129 |
| 1292 | Rogue R., at Grants Pass | TT00°0 | Apr-Sept. | 052.0 | 127 |

b 1938-39 excepted

RESERVOIR STORAGE

| | Usable Thousand a.f. in storage about April 1, 1956 | | | | | |
|---|---|--------------------------|---------------------------|----------------------------|--------------------------|-----------------------------|
| Reservoir | Capacity 1000 a.f. | 1956 | 1955 | 1954 | 15-Yr. Avg. 1938-52 | 1956 as % of 15-Yr. Avg, |
| Fmigrant Gap Fish Lake Fourmile Lake Hyatt Prairie | 8.3 7.8 16.1 16.1 | 7.2 5.1 9.0 7.2 | 3.0 5.6 9.9 10.3 | 8.3 7.0 15.1 14.5 | 8.0 5.0 7.5 6.7 | 90 102 120 107 |
| Total (4 Reservoirs) | L ₁ 8.3 | 28.5 | 28.8 | 44.9 | 27.2 | 105 |

SNOW COVER As of April 1, 1956

| Snow Course | | | 1956 | | Water Content (in) | | | 1956 as |
|---------------|--------------------|----------------|-----------------------|--------------------------|--------------------|-------------|------------------------|----------------------|
| No. | Name | Elev. | Snow Depth (in) | Water Content (in) | 1955 | 1954 | 15 yr. Avg. 1938-52 | % of 15- yr. Avg. |
| be | Low 40001 | | | | | | | |
| 23Gl | Goolaway Gap | 3050 | 18 | 8.5 | 0.0 | alm alm | 1.1** | 773 |
| 23G2 | Goolaway Mtn. | 3780 | 53 | 24.5 | 6.5 | ~~~ | 3.7** | 662 |
| 22G2 | Silver Burn | 3720 | 48 | 19.8 | 12.4 | 14.3 | 11.1 | 178 |
| 22G9 | So. Fk, Canal | 3500 | 3 | .6 | 0,0 | 0,0 | 1.6 | 38 |
| - | Average * | | erine(g)a | 13.4 | 4.7 | 7.2 | 4.4 | 305 |
| | 40001 to 60001 | Processor day; | | | | | | |
| 23G4 | Althouse | 4400 | 45 | 17.7 | 2.9 | 5.1 | 6.8 | 260 |
| 22G13 | Billie Cr. Div. | 5300 | 87 | 39.1 | 23.9 | 20.3 | 23.4 | 167 |
| 22F18 | Diamond Lake | 5315 | 86 | 34.7 | 23.2 | 28.0 | 23.0 | 151 |
| 22614 | Fish Lake | 4865 | 53 | 23.2 | 12.3 | 12.4 | 11.7** | 198 |
| 32017 | Hobart Lake | 5010 | 20 | 8.1 | 0.5 | 8.9 | 6.3** | 129 |
| 22016 | Hyatt Pr. Res. | 4900 | 38 | 15.0 | 3,6 | 12.4 | 9.0 | 167 |
| 23G6 | Oregon Caves | 4000 | | easured | 0.0 | nim nim | adion solve | |
| 23G5 | Page Mountain | 4045 | 54 | 19.6 | 2.6 | (in-q april | nion circo | naison editor |
| 22020 | Siskiyou Summit | 4630 | 20 | 8.9 | ${f T}$ | nim nim | 4.0 | 222 |
| 22G1 | Whaleback | 5140 | 126 | 52.5 | 32.3 | 39.9 | | 150 |
| ~ | Average * | | | 24.9 | 12.3 | 18,1 | 14.9 | 167 |
| | Above 6000! | | | | | | | |
| 22G6 | Annie Spring | 6018 | 169 | 62.9 | 32.3 | 47.8 | 47.4 | 133 |
| 22 G21 | Big Red Mtn. | 6500 | Report | | 21.4 | 42.6 | 28.6 | - |
| 22G12 | Fourmile Lake | 6000 | 98 | 41.0 | 25.2 | 25.6 | ation sales | colors colors |
| 23G 3 | Grayback Pk. | 6000 | - | delayed | 25.7 | 36.4 | 25.4 | - |
| 22G22 | Little Red Mtn. | 6500 | | delayed | 15.9 | 32.9 | 22.3 | |
| 22G5 | Park Hdqs. | 6450 | 195 | 78.4 | 41.0 | 63.6 | 64.8** | 121 |
| 22Hl | Scragg Mtn, | 6200 | | delayed | 19.1 | 37.6 | 29.3** | |
| 22G1.0 | Seven Lakes #1 | 6800 | 150 | 70.4ª | 53.0 | 65.9 | 51.2 | 138 |
| 22G11 | Seven Lakes #2 | 6200 | 128 | 59. <u>1</u> a | 40.9 | 45.1 | 40.8** | 145 |
| 22G18 | Wagner Butte | 6900 | 61 | 23.9 | 12.3 | 23.4 | 16.9 | 141 |
| | Average* | | | 58,9 | 35.9 | 49.2 | 44.2 | 133 |
| Avera | ge*(17 snow course | 3) | | 32.2 | 17.5 | 25.8 | 21.1 | 153 |

^aTelegraphic hat less than 15 yrs. of record in 1938-52 period but not less than 5 yrs.

*Only reporting snow courses with a 15 year average used.

SOIL MOISTURE

| Soils in: | Fall Status | Current status as of April 1, 1956 | | | | | | |
|---------------|-------------|--|--|--|--|--|--|--|
| Lower Valleys | | end, last year, all mountain and valley extremely dry. An unusual combination of | | | | | | |
| Upper Valleys | heavy preci | heavy precipitation and early winter snow-melt has completely "recharged" all watersheds so that all | | | | | | |
| Mountains | | ow extremely wet. | | | | | | |